

5            **A METHOD FOR CHANGING A TARGET ARRAY, A METHOD FOR**  
**ANAYLZING A STRUCTURE, AND AN APPARATUS, A STORAGE MEDIUM**  
**AND A TRANSMISSION MEDIUM THEREFOR**

**ABSTRACT OF THE DISCLOSURE**

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The objective of the present invention is the efficient analyzation of the structure of an array.

By performing the prev(S) calculation for a character string S, if in the character string S  
15 a like variable is present upstream of a second variable, the second variable is changed to  
a numerical value that indicates the distance to the upstream like variable. But if in the  
character string S a like variable is not present upstream of a variable, that variable is  
changed to "0" to obtain a character string S1. Further, by performing the compl(S)  
calculation for the a character string S, if in the character string S a complementary  
20 variable is present upstream of a second variable, the second variable is changed to a  
numerical value that indicates the distance to the complementary variable. But if in the  
character string S a complementary variable is not present upstream of a variable, that  
variable is changed to "0" to obtain a character string S2 (102). A single suffix tree  
(structure suffix tree) is generated by regarding the character strings S1 and S2 as a pair  
25 of corresponding character strings (104 to 114), and the obtained structure suffix tree is  
employed to analyze the structure of the array that is represented by the character string  
S.